FIG. 1

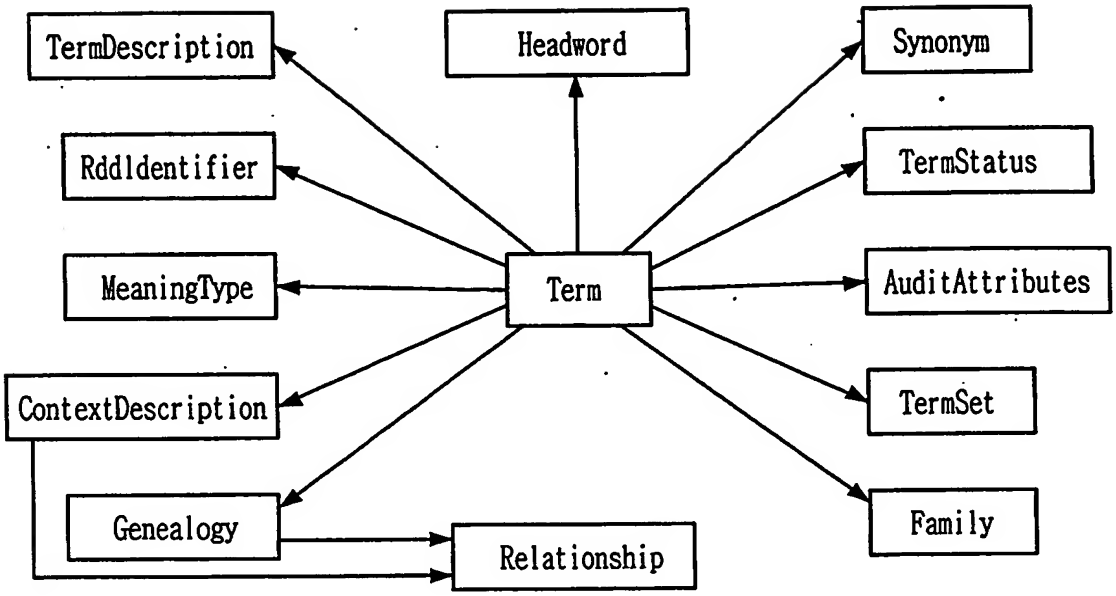

TermDescription
Headword
Synonym
RddIdentifier
TermStatus
MeaningType
Term
AuditAttributes
ContextDescription
TermSet
Genealogy
Family
Relationship

FIG. 2

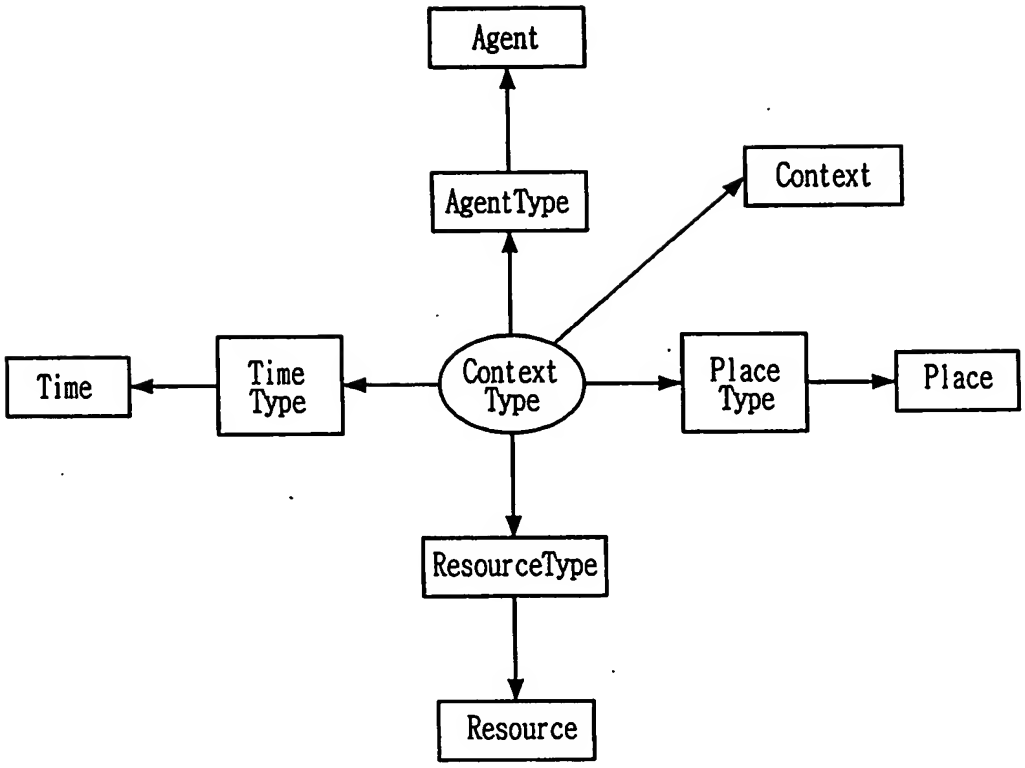

Agent
AgentType
Context
Time
Time Type
Context Type
Place Type
Place
ResourceType
Resource

FIG. 3

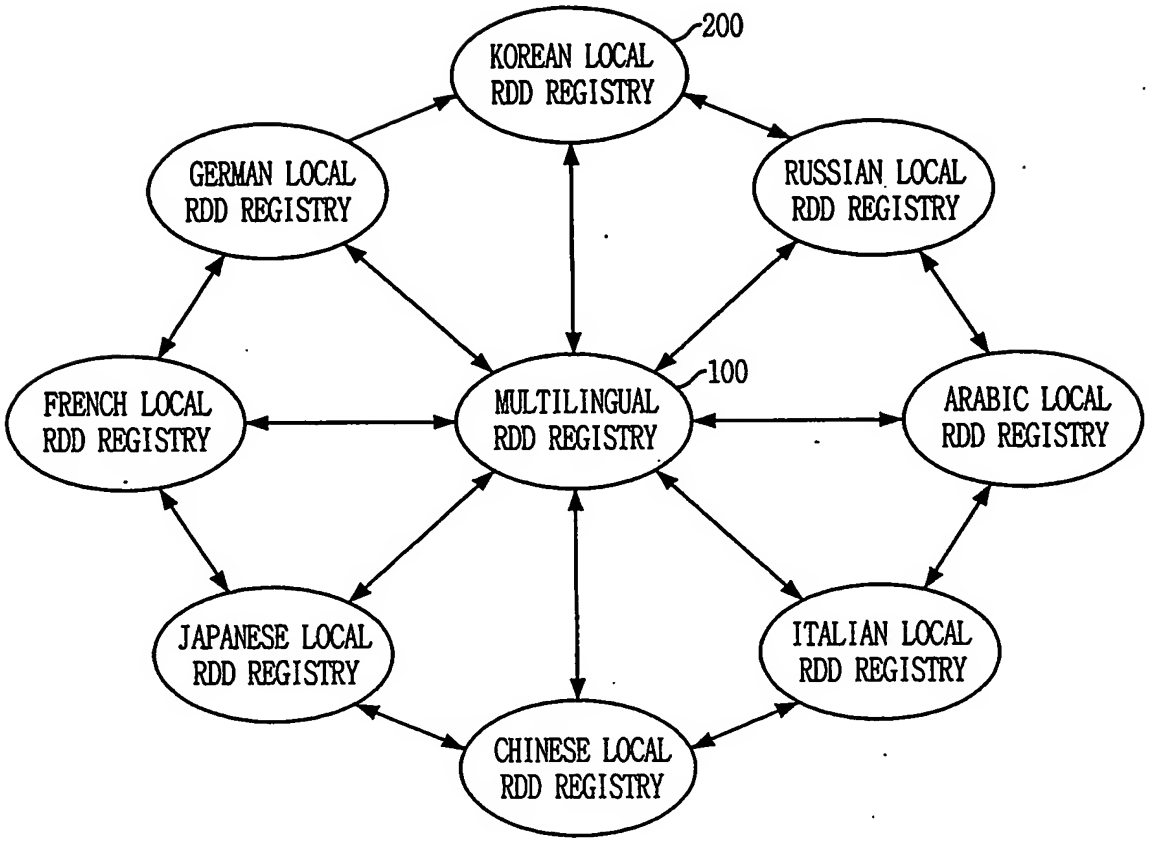

200
KOREAN LOCAL RDD REGISTRY
GERMAN LOCAL RDD REGISTRY
RUSSIAN LOCAL RDD REGISTRY
100
FRENCH LOCAL RDD REGISTRY
MULTILINGUAL RDD REGISTRY
ARABIC LOCAL RDD REGISTRY
JAPANESE LOCAL RDD REGISTRY
ITALIAN LOCAL RDD REGISTRY
CHINESE LOCAL RDD REGISTRY

FIG. 4A

```
<?xml version="1.0" encoding="UTF-8"?>
<!--================================================================
ISO/IEC 21000-6 Rights Data Dictionary XML Schema Version 1.0
================================================================-->
<xs:schema targetNamespace="urn:mpeg:mpeg21:2003:07-RDD-NS"
xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:rdd="urn:mpeg:mpeg21:2003:0
7-RDD-NS">
  <xs:annotation>
    <xs:documentation>
Rights Data Dictionary Registry version 1.0
</xs:documentation>
  </xs:annotation>
  <xs:element name="Term" type="rdd:TermType">
    <xs:annotation>
      <xs:documentation>
        A Semantic element with a defined Meaning and an RddIdentifier
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Headword" type="rdd:HeadwordType">
    <xs:annotation>
      <xs:documentation>
        The primary, human-readable Name of a Term according to its Authority
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Authority" type="rdd:AuthorityType">
    <xs:annotation>
      <xs:documentation>
        An Agent responsible for Ascribing an Attribute to a Term or TermAttribute.
      </xs:documentation>
    </xs:annotation>
```

FIG. 4B

```
</xs:element>
  <xs:element name="AuthorityID" type="xs:string">
    <xs:annotation>
      <xs:documentation>Identifier of Authority</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="TermStatus" type="rdd:TermStatusType">
    <xs:annotation>
      <xs:documentation>
A Status of a Term according to its TermAttributes.
</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="RddIdentifier" type="xs:string">
    <xs:annotation>
      <xs:documentation>
The unique Idnetifier of a Term in the RDD ictionary
</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="MeaningType" type="rdd:MeaningType">
    <xs:annotation>
      <xs:documentation>
        An abstract element of significance represented in RDD by a Term
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="ContextDescription">
    <xs:annotation>
      <xs:documentation>
        A Group of Relationships describing the attributes of a Context.
      </xs:documentation>
```

FIG. 4C

```
</xs:annotation>
    <xs:complexType>
      <xs:complexContent>
        <xs:extension base="rdd:ContextDescriptionType"/>
      </xs:complexContent>
    </xs:complexType>
  </xs:element>
  <xs:element name="Genealogy">
    <xs:annotation>
      <xs:documentation>
        A Group of Relationships that determine the derivation of, and constraints on,
Meaning for a Term, and which are true regardless of Context.
      </xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:complexContent>
        <xs:extension base="rdd:GenealogyType"/>
      </xs:complexContent>
    </xs:complexType>
  </xs:element>
  <xs:element name="Comment">
    <xs:annotation>
      <xs:documentation>
        A Natural language annotation of something for the purpose of amplification or
clarification of its Meaning.
      </xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:complexContent>
        <xs:extension base="rdd:CommentType"/>
      </xs:complexContent>
    </xs:complexType>
```

FIG. 4D

```
</xs:element>
  <xs:element name="ActionFamily" type="rdd:ActionFamilyType">
    <xs:annotation>
      <xs:documentation>
        A group of Relationships expressing the impact of an ActType as a set of one-
to-one Relationships between its Agents, Resources, Times and Palces.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="ContextFamily" type="rdd:ContextFamilyType">
    <xs:annotation>
      <xs:documentation>
        A Group of Relationships expressing the impact of a Type of Context as a set
of one-to-one Relationships between a Type of Context and its Agents,
Resource,Times and Places.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Audit" type="rdd:AuditType">
    <xs:annotation>
      <xs:documentation>
        A Set of attributes of an Event in the history of the Term or TermAttribute
within the RDD Dictionary
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Family" type="rdd:FamilyType">
    <xs:annotation>
      <xs:documentation>
        A Group of Relationships that determine attribute inheritance from one Term to
others according to the ContextModel
      </xs:documentation>
```

FIG. 4E

```
</xs:annotation>
  </xs:element>
  <xs:element name="Synonym">
    <xs:annotation>
      <xs:documentation>An alternative Name of a Term</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:complexContent>
        <xs:extension base="rdd:SynonymType"/>
      </xs:complexContent>
    </xs:complexType>
  </xs:element>
  <xs:element name="AccessStatus" type="rdd:AccessStatusType">
    <xs:annotation>
      <xs:documentation>
        A Status whose Value determines which RddUsers may have access to a Term
or TermAttribute.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="TermDescription" type="rdd:TermDescriptionType">
    <xs:annotation>
      <xs:documentation>
        A natural language Description of the Meaning of a Term.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Translation" type="rdd:TranslationType">
    <xs:annotation>
      <xs:documentation>Translation of a Heaword</xs:documentation>
    </xs:annotation>
  </xs:element>
```

FIG. 4F

```
<xs:element name="TermSet" type="rdd:TermSetType">
    <xs:annotation>
      <xs:documentation>
        Two or more Terms or TermSets grouped together under an Authority for any
purpose.
      </xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Type" type="rdd:TypeType">
    <xs:annotation>
      <xs:documentation>The property of the headword.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="Language">
    <xs:annotation>
      <xs:documentation>
        A Natural Language in which a Lexical Manifestation can be expressed.
      </xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:simpleContent>
        <xs:extension base="xs:language">
          <xs:attribute name="scheme" default="iso639"/>
        </xs:extension>
      </xs:simpleContent>
    </xs:complexType>
  </xs:element>
  <xs:element name="AllowedValue" type="rdd:AllowedValueType"/>
  <!--==============Complext Type================-->
  <xs:complexType name="HeadwordType">
    <xs:sequence>
      <xs:element name="HeadwordText" type="xs:string">
```

FIG. 4G

```
<xs:annotation>
          <xs:documentation>An Instance of Headword</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="rdd:TermDescription" minOccurs="0"/>
      <xs:element ref="rdd:Audit" minOccurs="0"/>
      <xs:element ref="rdd:AccessStatus"/>
      <xs:element ref="rdd:RddIdentifier"/>
      <xs:element ref="rdd:MeaningType"/>
      <xs:element ref="rdd:ContextDescription" minOccurs="0"/>
      <xs:element ref="rdd:Genealogy" minOccurs="0"/>
      <xs:element ref="rdd:Family" minOccurs="0"/>
      <xs:element ref="rdd:AllowedValue" minOccurs="0"/>
      <xs:element ref="rdd:TermStatus"/>
      <xs:element ref="rdd:TermSet" minOccurs="0"/>
      <xs:element ref="rdd:Type" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="SynonymType">
    <xs:sequence>
      <xs:element name="SynonymText" type="xs:string" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="CommentType">
    <xs:sequence maxOccurs="unbounded">
      <xs:element name="CommentTitle" type="xs:string"/>
      <xs:element name="CommentText" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="GenealogyType">
    <xs:sequence>
      <xs:element name="Has" type="xs:string" minOccurs="0"
```

FIG. 4H

```
maxOccurs="unbounded"/>
      <xs:element      name="HasComponent"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="HasMember"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="HasValue"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="Is"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsA"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsAClassFromSet"      type="xs:string"      minOccurs="0"
axOccurs="unbounded"/>
      <xs:element   name="IsActTypeBegottenBy"   type="xs:string"   minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element   name="IsAgentTypeBegottenBy"   type="xs:string"   minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsAllowedValueOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsAttributeOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsContextTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsEqualTo"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsExpressionOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element   name="IsHistoricQualityOf"   type="xs:string"   minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsIdentifierOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsNameOf" type="xs:string" minOccurs="0"
```

FIG. 4I

```
maxOccurs="unbounded"/>
      <xs:element      name="IsOpposedTo"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsPartOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsPlaceTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsPotentialQualityOf" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsPresentQualityOf" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsQualityTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsReciprocalOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsRelatingTermBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsRelatingTermFrom" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsRelatingTermTo" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsResourceTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="IsStateTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsStatusOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element, name="IsTimeTypeBegottenBy" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element      name="IsTypeOf"      type="xs:string"      minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
```

FIG. 4J

```
</xs:complexType>
  <xs:complexType name="ContextDescriptionType">
    <xs:sequence>
      <xs:element name="HasActType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="HasAgentType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="HasPlaceType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="HasResourceType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="HasStateType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="HasTimeType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ActionFamilyType">
    <xs:sequence>
      <xs:element name="BegetsAgentType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="BegetsContextType" type="xs:string" minOccurs="0"
axOccurs="unbounded"/>
      <xs:element name="BegetsPlaceType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="BegetsResourceType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
<xs:element name="BegetsTimeType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
<xs:element name="BegetsRelatingTerm" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
    </xs:sequence>
```

FIG. 4K

```
</xs:complexType>
  <xs:complexType name="ContextFamilyType">
    <xs:sequence>
      <xs:element name="BegetsActType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="BegetsAgentType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="BegetsPlaceType" type="xs:string" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="BegetsQualityType" type="xs:string" minOccurs="0"
                  maxOccurs="unbounded"/>
      <xs:element name="BegetsRelatingTerm" type="xs:string" minOccurs="0"
                  maxOccurs="unbounded"/>
      <xs:element name="BegetsResourceType" type="xs:string" minOccurs="0"
                  maxOccurs="unbounded"/>
      <xs:element name="BegetsStateType" type="xs:string" minOccurs="0"
                    maxOccurs="unbounded"/>
      <xs:element name="BegetsTimeType" type="xs:string" minOccurs="0"
                    maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="AllowedValueType">
    <xs:sequence>
      <xs:element name="HasAllowedValue" type="xs:string"
maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TermDescriptionType">
    <xs:sequence>
      <xs:element name="Definition" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>
```

FIG. 4L

```
A TermDescription according to formal rules.</xs:documentation>
        </xs:annotation> .
        <xs:complexType>
          <xs:simpleContent>
            <xs:extension base="xs:string">
              <xs:attribute name="DefinitionType">
                <xs:simpleType>
                  <xs:restriction base="xs:QName">
                    <xs:enumeration value="Definition"/>
                    <xs:enumeration value="RddDefinition"/>
                    <xs:enumeration value="AdoptedDefinition"/>
                  </xs:restriction>
                </xs:simpleType>
              </xs:attribute>
            </xs:extension>
          </xs:simpleContent>
        </xs:complexType>
      </xs:element>
      <xs:element name="Example" type="xs:string" minOccurs="0"
maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>
            An Instance of usage illustrating the Meaning of a Term
          </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="rdd:Language"/>
      <xs:element ref="rdd:Comment" minOccurs="0"/>
      <xs:element ref="rdd:Synonym" minOccurs="0"/>
      <xs:element ref="rdd:Translation" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
```

FIG. 4M

```
<xs:complexType name="TermType">
    <xs:sequence>
      <xs:element ref="rdd:Authority"/>
      <xs:element ref="rdd:Headword" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="AuditType">
    <xs:sequence>
      <xs:element name="Date" type="xs:date"/>
      <xs:element name="ActType" type="rdd:AuditActType"/>
      <xs:element ref="rdd:AuthorityID"/>
      <xs:element name="AuditReason" type="xs:string"/>
      <xs:element name="AuditComment" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="FamilyType">
    <xs:choice maxOccurs="unbounded">
      <xs:element ref="rdd:ActionFamily" minOccurs="0"/>
      <xs:element ref="rdd:ContextFamily" minOccurs="0"/>
    </xs:choice>
  </xs:complexType>
  <xs:complexType name="PersonType">
    <xs:sequence>
      <xs:element name="FirstName" type="xs:string"/>
      <xs:element name="LastName" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="ContactType">
    <xs:sequence>
      <xs:element name="PersonName" type="xs:string"/>
      <xs:element name="Email" type="xs:string"/>
      <xs:element name="Telephone" type="xs:string"/>
```

FIG. 4N

```
<xs:element name="Fax" type="xs:string" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="AuthorityType">
    <xs:sequence>
      <xs:element ref="rdd:AuthorityID"/>
      <xs:element name="AuthorityName"/>
      <xs:element name="Contact" type="rdd:ContactType"/>
      <xs:element name="Address" type="rdd:AddressType"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TranslationType">
    <xs:sequence>
      <xs:element name="IsTranslationOf" type="xs:string"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TermSetType">
    <xs:sequence>
      <xs:element name="TermSetName" type="xs:string">
        <xs:annotation>
          <xs:documentation>REL Termset, BCD Termset, XYZ
TermSet.....</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="rdd:AuthorityID"/>
    </xs:sequence>
  </xs:complexType>
  <xs:complexType name="TypeType">
    <xs:sequence>
      <xs:element name="HasType" type="xs:string" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>Has only HasType</xs:documentation>
```

FIG. 40

```
      </xs:annotation>
     </xs:element>
   </xs:sequence>
 </xs:complexType>
 <xs:complexType name="AddressType">
   <xs:sequence>
     <xs:element name="URL" type="xs:anyURI"/>
     <xs:element name="PostalCode" type="xs:string"/>
     <xs:element name="Street"/>
     <xs:element name="City"/>
     <xs:element name="ProvinceState"/>
     <xs:element name="Country"/>
   </xs:sequence>
 </xs:complexType>
 <!--==================Simple Type============================-->
 <xs:simpleType name="TermStatusType">
   <xs:union>
     <xs:simpleType>
       <xs:restriction base="xs:Name">
         <xs:enumeration value="StandardizedTerm"/>
         <xs:enumeration value="NativeTerm"/>
         <xs:enumeration value="AdoptedTerm"/>
         <xs:enumeration value="MappedTerm"/>
         <xs:enumeration value="IsolatedTerm"/>
       </xs:restriction>
     </xs:simpleType>
   </xs:union>
 </xs:simpleType>
 <xs:simpleType name="AuditActType">
   <xs:restriction base="xs:string">
     <xs:enumeration value="Create"/>
     <xs:enumeration value="Modify"/>
```

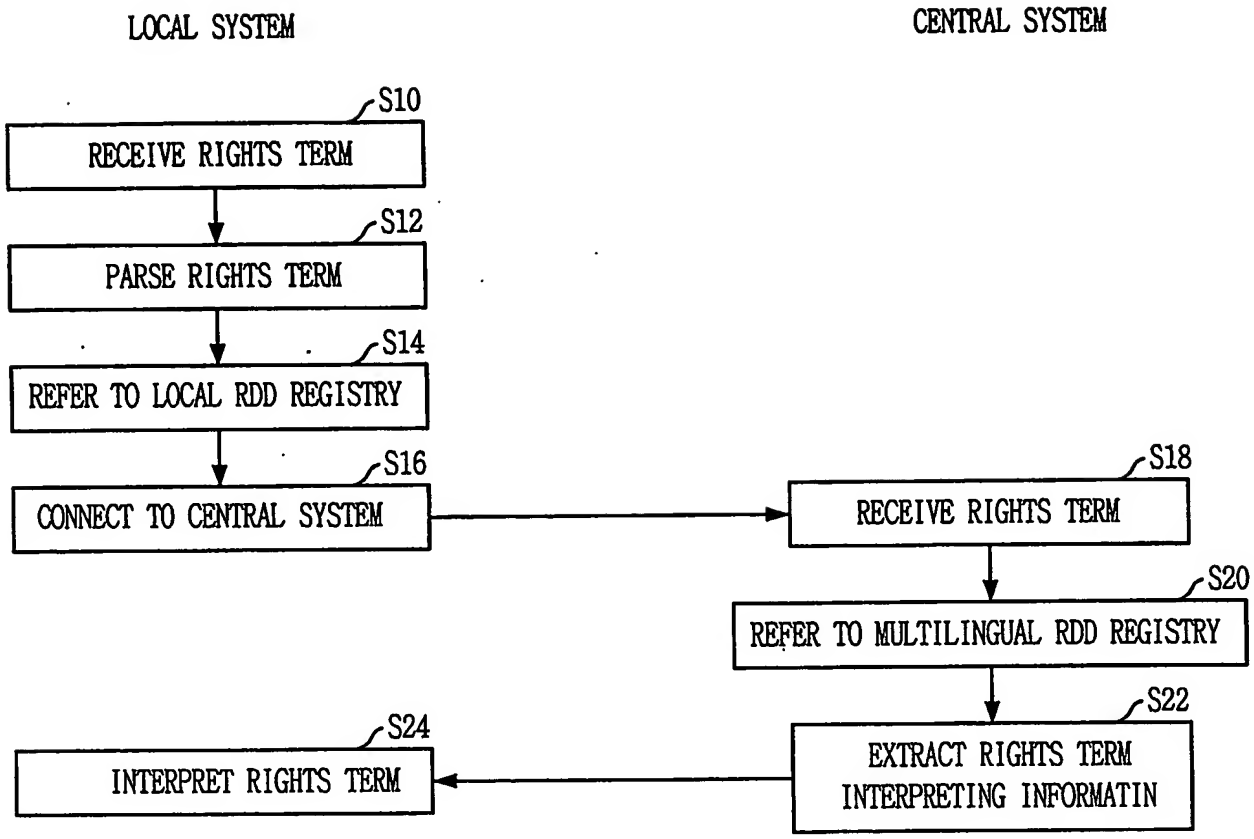
FIG. 4P

```
<xs:enumeration value="Delete"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:simpleType name="MeaningType">
    <xs:union>
      <xs:simpleType>
        <xs:restriction base="xs:Name">
          <xs:enumeration value="Original"/>
          <xs:enumeration value="PartlyDerived"/>
          <xs:enumeration value="Derived"/>
          <xs:enumeration value="Axiomatic"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:union>
  </xs:simpleType>
  <xs:simpleType name="AccessStatusType">
    <xs:union>
      <xs:simpleType>
        <xs:restriction base="xs:Name">
          <xs:enumeration value="OpenAccess"/>
          <xs:enumeration value="RestrictedAccess"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:union>
  </xs:simpleType>
</xs:schema>
```

FIG. 5

```
<?xml version="1.0" encoding="UTF-8"?>
<Term ID="23">
        <Headword> 적응시키다 </Headword>
        <Definition> 새로운 자원을 생성할 수 있도록 자원에 변경을 가하는 것 </Definition>
        <Authority>urn:mpeg21:2003:07-RDD-NS-KOR</Authority>
        ...
        <Comment> 최종 결과 두 개의 독립된 자원이 생성되며, 하나의 자원이 생성되는 경우에는 Adapt 가 아니라 Modify 임 </Comment>
        <Genealogy Type="IsTypeOf">Derive</Genealogy>
        <ActionFamily>
            <ActionType Type="BegetsContextType">적응이벤트</ActionType>
            <ActionType Type="BegetsAgentType">적응자</ActionType>
              <ActionType Type="BegetsResourceType">적응</ActionType>
              <ActionType Type="BegetsResourceType">적응의_원본</ActionType>
              <ActionType Type="BegetsResourceType">적응_도구</ActionType>
              <ActionType Type="BegetsTimeType">적응_시간</ActionType>
              <ActionType Type="BegetsPlaceType">적응_장소</ActionType>
        </ActionFamily>
</Term>
```

FIG. 6


LOCAL SYSTEM
CENTRAL SYSTEM
S10
RECEIVE RIGHTS TERM
S12
PARSE RIGHTS TERM
S14
REFER TO LOCAL RDD REGISTRY
S16
CONNECT TO CENTRAL SYSTEM
S18
RECEIVE RIGHTS TERM
S20
REFER TO MULTILINGUAL RDD REGISTRY
S22
EXTRACT RIGHTS TERM INTERPRETING INFORMATIN
S24
INTERPRET RIGHTS TERM